From:

Anders Heilsberg

Sent:

Friday, January 03, 1997 7:53 PM

To:

Paul Maritz: Ben Slivka

Subject:

RE: session on monday pm - bens slides take 2

Lastly, what is current thinking on extending Java the language, does Anders have any thoughts on this yet?

We've had a fair amount of discussions on language extensions. For VJ2 we're definitely doing Inner Classes (new language feature that allows classes to be nested, currently implemented by Sun's JDK 1.1 compiler). We're also working on a set of IDL directives that will allow you to implement COM objects without also having to create an IDL file (this will make it a lot easier to create scriptable ActiveX components in Java). Other extensions that have been discussed include properties, enums, assertions, and ifdefs, all of which could be implemented without VM extensions (meaning that the resulting .class files would run on other VMs). Finally, we've talked about language extensions that would allow you to directly access native APIs, such as the Win32 API-in this category we have such nasties as pointers, structs, and unions. From a security perspective, these are dangerous to say the least, and they might also have a rather profound impact on the rest of the language and the VM. The alternative solution (and the one that is currently being persued) is to build COM classes that selectively encapsulate the Win32 API.

BTW, there's been a fair amount of hostile traffic on the Java newsgroups on the topic of MS extending the Java platform. That, combined with Sun's "100% Pure Java" and their recent efforts to form a standardization committee, makes language extensions somewhat dangerous territory.

## Anders

-Original Message

Paul Maritz From:

Friday, January 03, 1997 4:23 PM Sent: To: Ben Slivka

Anders Heilsberg

Cc: Subject:

RE: session on monday pm - bens slides take 2

OK, However you should say "all major User & GDI functionality" - you are not really porting all of User / GDI (warts and all), at least I hope not.

Under issues, rather just say "Win32 devaluation", we should also say need to find further ways to integrate/exploit underlying Windows OS.

Lastly, what is current thinking on extending Java the language, does Anders have any thoughts on this yet?

-Original Message-Ben Slivka

From:

Sent:

Sent:

Friday, January 03, 1997 4:02 PM

To: **Paul Maritz** 

Subject: FW: session on monday pm - bens slides take 2

I left the "all USER and GDI" because that is really what we are doing, and there is nothing to prevent other companies (Sun w/AWT, Netscape w/IFC) from providing equivalent functionality. I'm sure billo will be unhappy with this, but I think we cannot sugar coat the truth here. I'm waiting for comments from yuvlan this evening on the tools slides.

<< File: Java - Jan 6, 1997.ppt >>

-Original Message--**Paul Maritz** From:

Friday, January 03, 1997 12:02 PM

To: Jim Allchin (Exchange); Ben Slivka; Bill Gates

Aaron Contorer; Brad Silverberg Cc:

Subject: session on monday pm

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There is a session on Monday 1/6 at 4pm for level 14+'s in the company for Billo et al to discuss our strategy wrt "NC's & Java". As part of this Billg & I would like to ask that:

- Jimall present <10 slides on what we are doing on "ZAW" this is summary level and will NOT substitute for the ZAW review on 1/14. The intent is to introduce the idea's behind ZAW to broader audience.</li>
  Bens present <10 slides on the Java work the we are doing: in VM, in runtime, it RAD tools. Again this is</li>
- summary level.

If short demo helps that is OK, but this is not intended primarily as demo session.

These will be presented in context on broader perspective to be painted by Billg. I will do first pass at these slides over the weekend, and will copy all.

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